ABSTRACT

Energy-aware software control in a computer system requires a display capable of supporting control of individual portions thereof so at to reduce its energy consumption. The energy-aware software control involves profiling screen usage patterns and their impact on the energy consumption by the display. The profiling results in an energy model. A determination is made when to prompt the energy-aware software control of the display. As well, a determination is made as to which screen portions of the display and what display parameters to control based on the energy model. Then, for each portion of the display to be controlled, controlling its display parameters, wherein the screen portions are controlled to attain energy conservation.